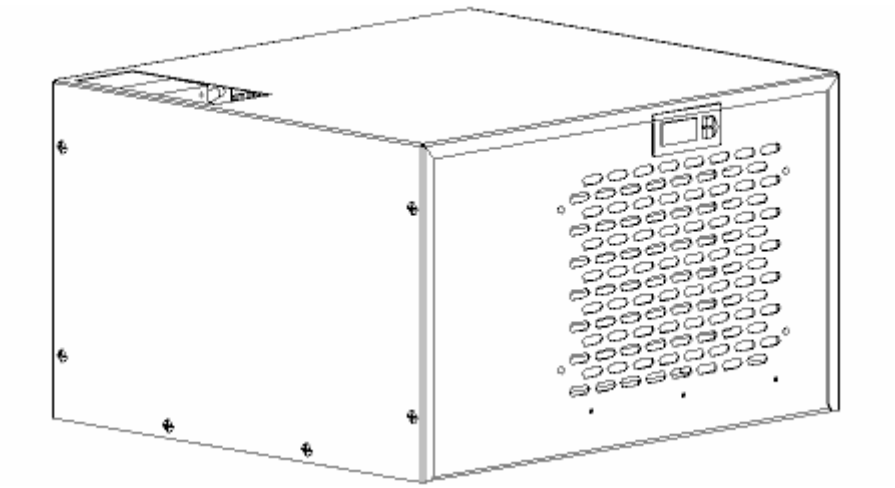
WINEMATE *Cooling Unit*

Use & Care Manual

VINO1500CD, CTED
VINO2500CD, CTED



Vinotemp International Corp.

www.vinotemp.com

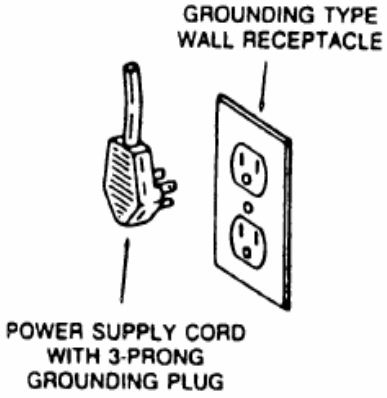
READ AND SAVE THESE INSTRUCTIONS

Important Safety Information

⚠ WARNING

To avoid the risk of electrical shock, property damage, personal injury or death:

- The power cord must be plugged into a 3-prong grounding-type wall receptacle, grounded in accordance with the National Electrical Code, ANSI/NFPA 70 - latest edition and local codes and ordinances.
- It is the personal responsibility of the consumer to have a proper 3-prong wall receptacle installed by a qualified electrician.
- DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE POWER CORD GROUNDING PRONG.
- A separate adequately fused and grounded circuit should be available for this appliance.
- Do not remove any grounding wires from individual components while servicing, unless the component is to be removed and replaced. *It is extremely* important to replace all grounding wires when components are replaced.



⚠ WARNING

ELECTRIC SHOCK HAZARD

Disconnect electric supply from appliance before servicing.

Replace all panels before operating.

Failure to do so could result in death or electrical shock.

- **DO NOT PLUG IN UNTIL 24 HOURS AFTER DELIVERY.**
- **DO NOT USE A GROUND FAULT INTERRUPTER (GFI).**
- **A DEDICATED 15 AMPCIRCUIT IS HIGHLY RECOMMENDED.**

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Feature Description

- VINO1500CD, CTED and VINO2500CD, CTED cooling units are designed and used to provide a stable temperature between 50~65 °F for suitable space at a normal environment.
- The refrigerated space will maintain humidity of 50~70% RH even when the environment becomes dry and humid.
- These temperatures and humilities are optimized for long term storage of wine.
- Multiple exhaust for top and rear hot air exhaust
- Self-contained ready for use and easy for installation

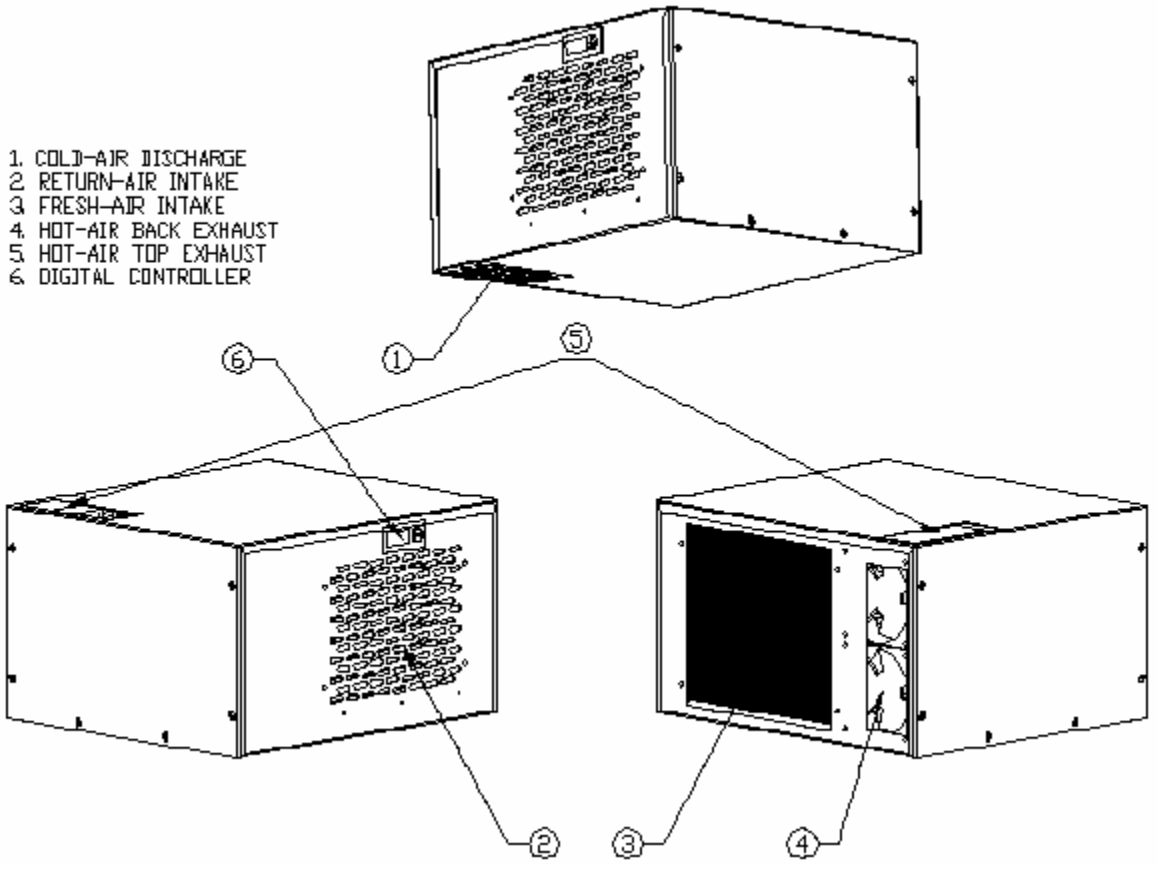


Fig. 1.1 FEATURES

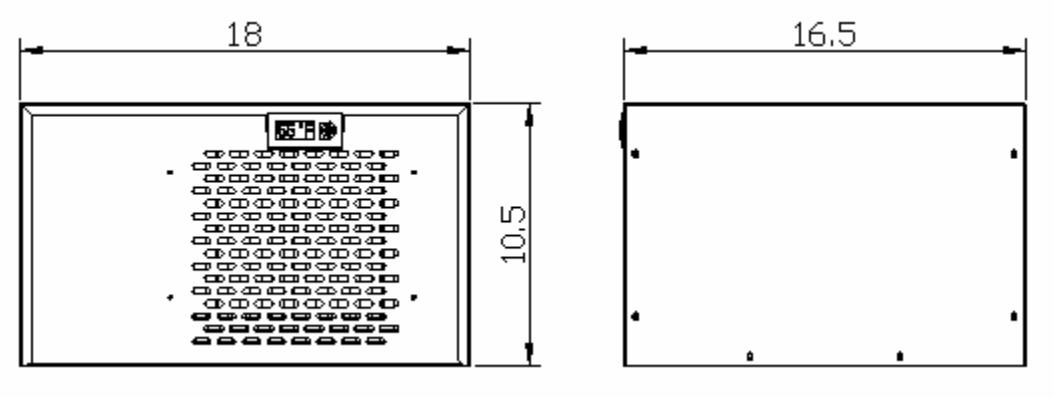


Fig. 1.2 DIMENSIONS

The dimension and capacity are specified as follows:

Model	Description	Cooling Capacity	Wine Capacity		Electrical	Weight
1500cd	Rear Exhaust	1500Btu/h 55°F Air Temp/ 75°F Ambient Temp	Up to 150 cu ft	800 bottles	115V/60Hz 4A	50 lb
1500cted	Top Exhaust	1500Btu/h 55°F Air Temp/ 75°F Ambient Temp	Up to 150 cu ft	800 bottles	115V/60Hz 5A	50 lb
2500cd	Rear Exhaust	2500Btu/h 55°F Air Temp/ 75°F Ambient Temp	Up to 250 cu ft	1200 bottles	115V/60Hz 4A	55 lb
2500cted	Top Exhaust	2500Btu/h 55°F Air Temp/ 75°F Ambient Temp	Up to 250 cu ft	1200 bottles	115V/60Hz 5A	55 lb

- **See the voltage, frequency and AMP from the label on the back of the cooling unit.**

Installation Instruction

1. Location

- Place the wine cellar in a properly ventilated location. Otherwise, heat exhausted by the cooling unit will build up and it will not operate properly.
- The exhaust area must not be closed space and must be ventilated.

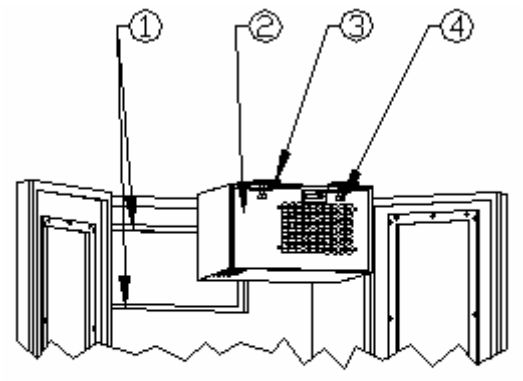
1) Rear Exhaust
- Leave min 6 “clearance from the rear to the wall.
- Leave min 12” clearance from the top to the ceiling.
- Leave min 6” clearance from the left and right sides.

2) Front Exhaust
- Leave min 6” clearance from the front if left and right sides unobstructed.
- Or, leave min 36” clearance from the front if left and right sides obstructed

3) Top Exhaust
- Leave min 12” from the top to the ceiling.
- Leave min 2 “clearance from the rear to the wall.
- Leave min 2” clearance from the left and right sides.

4) Side Exhaust
- Leave min 6 “clearance from the left or right side to the wall.
- Leave min 12” clearance from the top to the ceiling.

2. Installation



1. GASKET
2. COOLING UNIT
3. MOUNTING BRACKET
4. MOUNTING SCREW

Fig. 2.1 COOLING UNIT MOUNTING

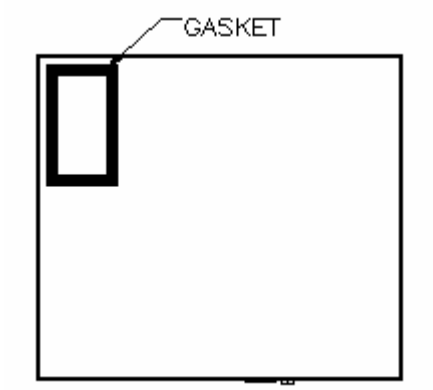


Fig. 2.2 TOP EXHAUST GASKET

- Cut a rectangular opening with the ¼" clearance at the rear of wine cabinet to the width and height of the cooling unit.
- If top exhaust, cut a rectangular opening at the top of the cabinet to the length and width of the top exhaust openings.
- Mount the gaskets on the four mounting sides.
- If top exhaust, place the gaskets along the top openings at the top of the cooling unit.
- Place the cooling unit to a flat and stable place.
- Then move it on the top of the rack temporally.
- Move the cooling unit towards the mounting sides and push to compress the gasket.
- Locate the 3 brackets (6) and use 7/16" wrench to tighten the 3 screws (7).
- Screw the exhaust and fresh air grille on the opening from the rear side of the cabinet.
- If top exhaust, install the top exhaust grille at the top of the cabinet.
- Plug the cooling unit in receptacle.
- Screw the 2 screws (4) and locate the light on the ceiling.
- Plug the light in receptacle.
- Plug the wine cabinet.

3. Electrical Cord

- We strongly recommend against the use of an extension cord. However, if you still select to use an extension cord, it is absolutely necessary that it is a UL LISTED 3-wire grounding type appliance extension cord. The marked rating of the extension cord should be 115 V, 15 A. or equivalent and not greater than 15ft in length.

Temperature & Humidity Control

1. Temperature Setting

- **Set the temperature at 55 °F for the optimum aging of wine**
- **Set the temperature higher at very high ambient temperature.**
- **On initial start-up, the time required to reach the desired temperature will vary, depending on the quantity of bottles, temperature setting and surrounding temperature.**
- **Allow 24 hours to stabilize the temperature for each new temperature setting operation**

2. Use of the controller

Fig. 3.1 DIGITAL CONTROLLER

1) Display

During normal operating conditions, the display shows the value measured by the air regulation probe. In case of active alarm, the temperature flashes alternately to the code alarm.

1.1 LED Functions

LED	MODE	FUNCTION
❄	ON	Compressor enabled
❄	Flashing	Anti-short cycle delay enabled
❄	ON	Defrost enabled
(( ))	ON	An alarm is occurring
°C/°F	ON	Measurement unit
°C/°F	Flashing	Programming phase

1.2 Front Panel Commands

SET: To display target set point; in programming mode it selects a parameter or confirm an operation.

(DEF) To start a manual defrost

(**UP**): To see the max. stored temperature; in programming mode it browses the parameter codes or increases the displayed value.

(**DOWN**) To see the min stored temperature; in programming mode it browses the parameter codes or decreases the displayed value.

To turn ON or OFF the controller (if enabled)

KEY COMBINATIONS:

+	To lock & unlock the keyboard.
SET +	To enter in programming mode.
SET +	To return to the room temperature display.

2) Alarm Signals

2.1 Code Description

Message	Cause	Outputs
"P1"	Room probe failure	Compressor output acc. to par. "Con" and "COF"
"HA"	Maximum temperature alarm	Outputs unchanged.
"LA"	Minimum temperature alarm	Outputs unchanged.
"CA"	Serious external alarm (i1F=bAL)	All outputs OFF.

2.2 Alarm Recovery

Probe alarms P1", start a few seconds after the fault in the related probe; they automatically stop a few seconds after the probe restarts normal operation. Check connections before replacing the probe. Temperature alarms "HA", "LA" automatically stops as soon as the temperature returns to normal value. Alarm "CA" (with i1F=PAL) recovers only by switching off and on the instrument.

3) Temperature Set-Point

3.1 How to see the set-point

1. Push and immediately release the SET key: the display will show the Set-point value;
2. Push and immediately release the SET key or wait for 5 seconds to display the probe value again.

3.2 How to change the set-point

1. Push the SET key for more than 3 seconds to change the Set point value;
2. The value of the set point will be displayed and the "°C" or "°F" LED starts blinking;
3. To change the Set value, push the o or n arrows within 10s.
4. To memorize the new set point value, push the SET key again or wait 10s.

4) Humidity Adjustment

1. Press the **Set** + keys for 3 sec. (the "**°C" or "°F"** LED starts blinking).
2. Release the keys, then push again the **Set** + keys for more than 7sec, the **Pr2** label will be displayed immediately followed from the **HY** parameter.
3. Select the required parameter **Fon** by up or down keys .
4. Press the "**SET**" key to display its value.
5. Use up or down keys to change its value.
6. The default value is 5, change high or low value to maintain high or low humidity.
7. Press "**SET**" to store the new value.
8. **To exit**: Press **SET +** or wait 15sec without pressing a key.

5) Manual Defrost

Push the DEF key for more than 2 seconds and a manual defrost will start.

Care Guide

⚠ WARNING

Always check wiring harness connections before initiating any test procedures.

Disconnect electric power from the appliance before performing any maintenance or repairs.

Voltage checks should be made by inserting meter probes beside the wires in the connector blocks with the electric power source on and the connector block plugged in.

Resistance checks should be made on components with the electric power off and the connector block disconnected.

⚠ WARNING

ELECTRIC SHOCK HAZARD

Disconnect the electrical power before servicing any components.
Failure to do so can result in death or electrical shock.

I. Model Number & Serial Label and Component Locations

Fig. 4.1

II. Condenser Coil Cleaning

- The condenser coil is on the rear side of the wine cooling unit.
- Clean the condenser coil regularly. Coil may need to be cleaned at least every 6 months.
- Unplug the cooling unit or disconnect power.

- Use a vacuum cleaner with an extended attachment to clean the coil when it is dusty or dirty.
- Plug the cooling unit or reconnect power.

III. Moisture Removing

- Remove the extra condensate if it is accumulated in the wine cabinet at high ambient temperature and humidity.

Troubleshooting

This Troubleshooting Chart is not prepared to replace the training required for a professional refrigeration service person, not is it comprehensive

Troubleshooting Chart

Complaint	Possible Causes	Response
1. Unit not running		
	a. Power cord unplugged b. No power to unit c. Defrost light blinking d. Compressor light blinking e. Setting higher than ambient temperature f. Low voltage. g. Incorrect or loose wirings.	a. Check for power cord plug b. Check power at receptacle & fuses c. Unit is under defrost mode d. Unit waits for anti-short cycle delay e. Lower temperature setting f. Contact an authorized electrician g. Check all wirings and connections
2. Fan running almost continually		
	a. 5 minute post-compressor fan running mode	a. See 4) to set FON = 0
3. Temperature fluctuating		
	a. Air sensor	a. When using an air sensor, the wine bottle temperature is mainly controlled by the average air temperature. If the set-point is 55F with the differential 4F, the cooling unit turns on at 59F of air temperature and turns off at 55F of air temperature. The average air temperature is 57F, and then the wine temperature is around 57+/-0.5F. The air is light enough to change so quickly that it maintains relatively constant average temperature that would prevent wine bottle temperature from varying.
4. Temperature too high		
	a. Improper cabinet seals b. Setting too high c. Cabinet too large d. Ambient temperature too high e. Exhaust too close to wall or ceiling f. Malfunctioning fans g. Improper evaporator or condenser airflow h. Dirty Condenser	a. Check for gasket and door opening b. Lower setting c. Check for excessive size d. Check for installation location e. Leave 4~6 “clearance between the exhaust side and the wall or ceiling; leave 2~4” clearance for the fresh-air supply side; leave 1~2” for the other sides f. Check for both evaporator and condenser fans g. Check for air restrictions h. Clean condenser

	i. Iced evaporator j. Low voltage k. Operating 60 Hz unit at 50Hz l. Sealed system problem m. Undercharge or overcharge	i. Defrost and reset temperature j. Check power supply k. Use proper 60 Hz l. Call service for checking loss of refrigerant or restrictions m. Call service to add or remove refrigerant
5. Unit running too long or continually		
	a. Improper cabinet seals b. Exhaust too close to wall or ceiling c. Cabinet too large d. Ambient temperature high>80 F e. Improper evaporator or condenser airflow f. Dirty Condenser g. Iced evaporator h. Malfunctioning fans i. Low voltage j. Operating 60 Hz unit at 50Hz k. Sealed system problem l. Undercharge or overcharge	a. Check for gasket and door opening b. Leave 4~6 “clearance between the exhaust side and the wall or ceiling; leave 2~4” clearance for the fresh-air supply side; leave 1~2” for the other sides c. Check for excessive size or increase setting d. Check for installation location or increase setting e. Check for air restrictions f. Clean condenser g. Defrost and reset temperature h. Check for both evaporator and condenser fans i. Check power supply j. Use proper 60 Hz k. Call service for checking loss of refrigerant or restrictions l. Call service to add or remove refrigerant
6. “HA” maximum temperature alarm blinking or beeping		
	a. Ambient temperature too high b. Improper cabinet seals c. Cabinet too large d. Improper evaporator or condenser airflow e. Dirty Condenser f. Iced evaporator g. Malfunctioning fans h. Low voltage i. Operating 60 Hz unit at 50Hz j. Sealed system problem k. Undercharge or overcharge l. Exhaust too close to wall or ceiling	a. Check for installation location b. Check for gasket and door opening c. Check for excessive size d. Check for air restrictions e. Clean condenser f. Defrost and reset temperature g. Check for both evaporator and condenser fans h. Check power supply i. Use proper 60 Hz j. Call service for checking loss of refrigerant or restrictions k. Call service to add or remove refrigerant l. Leave 4~6 “clearance between the exhaust side and the wall or ceiling; leave 2~4” clearance for the fresh-air supply side; leave 1~2” for the other sides
7. Compressor stopping and starting but short running time		
	a. Incorrect temperature setting b. Incorrect voltage	a. Set 55 to 60 °F b. Check for voltage

	c. Failed thermistor	c. Check thermistor by placing it in ice water and measuring resistance
	d. Failed components	d. Check compressor windings, start relay and overload protector.
	e. Improper condenser airflow	e. Check for condenser fan
	f. Dirty condenser	f. Clean condenser
	g. Overcharge of refrigerant	g. Call service for removing refrigerant
	h. Discharge or suction pressure too high	h. Call service for OEM information
8. Fan motor running but compressor not running		
	a. Incorrect power supply	a. Check for proper voltage
	b. Incorrect or loose wirings	b. Check all wirings and connections
	c. Failed components	c. Check start relay, start capacitor, overload protector, compressor.
	d. Liquid refrigerant in the compressor	d. Call service for OEM information.
9. Compressor running but fan not running		
	a. Fan blade stuck	a. Check for proper clearance
	b. Incorrect or loose wirings	b. Check all wirings
	c. Failed motors	c. Call service for checking open or shorted windings
10. No cooling but compressor and fan running		
	a. Evaporator airflow restriction	a. Check for airflow through evaporator
	b. Refrigerant leakage	b. Check for loss of refrigerant
	c. Refrigeration system restriction	c. Call service for checking restrictions
11. Evaporator Icing		
	a. Air flow restriction	a. Check for fans
	b. Refrigerant leaking	b. Check for sealed system leakage
	c. Capillary tube blockage	c. Check for low side pressure
12. House circuit tripping		
	a. Incorrect fuse or breaker	a. Check for proper fuse or breaker
	b. Incorrect wirings	b. Check for wirings and connections
	c. Failed components	c. Call service
13. Noisy operation		
	a. Mounting area not firm	a. Add support to improve installation
	b. Loose parts	b. Check fan blades, bearings, cabinet washers, tubing contact and loose screws.
	c. Compressor overloaded due to high ambient temperatures or airflow restriction	c. Check for airflow blockage
	d. Malfunctioning components	d. Call service for checking Internal loose, inadequate lubrication and incorrect wirings

Wiring Diagram

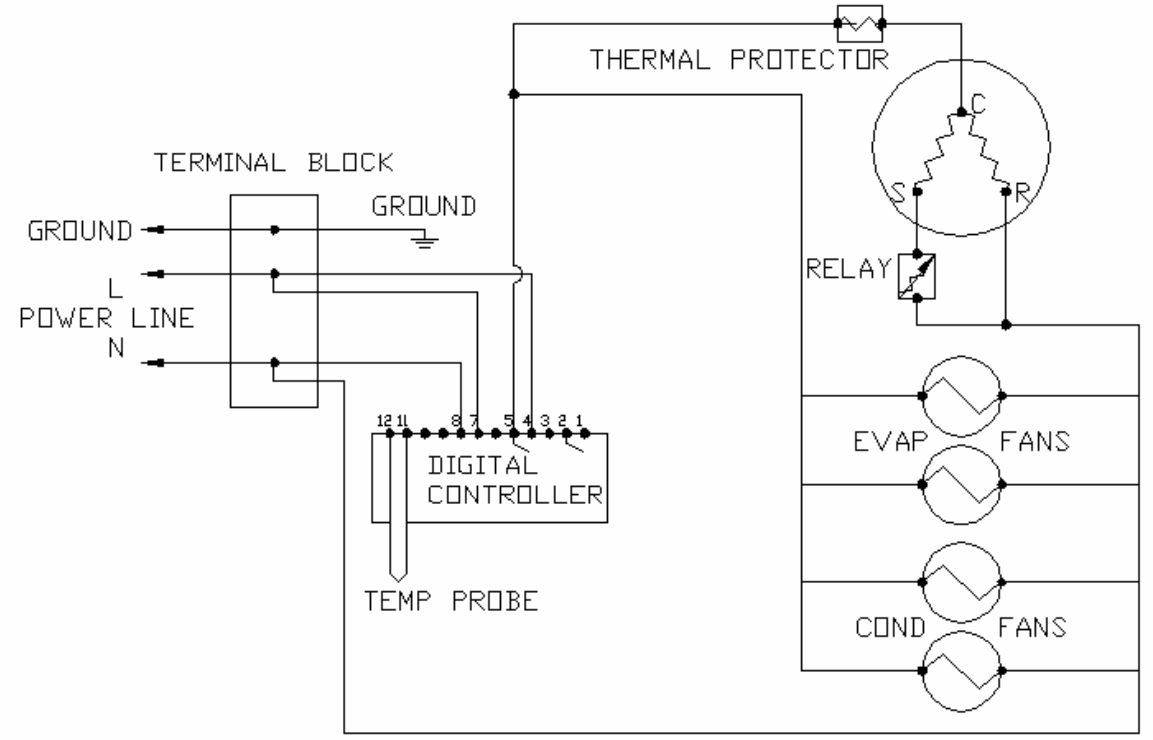


Fig. 6.1 WIRING DIAGRAM

Customer Support

If you still have problems, please contact us at:

Vinotemp International
17631 South Susana Road
Rancho Dominguez, CA 90221
Tel: (310) 886-3332
Fax: (310) 886-3310
Email: info@vinotemp.com

Warranty

Thank you for choosing a Vinotemp wine cabinet.

Please enter the complete model and serial numbers in the space provided:

Model_____
Serial No._____

Attach your purchase receipt to this owner's manual.

1. Limited Warranty

VINOTEMP warrants its products to be free from defects due to workmanship or materials under normal use and service, for twelve months after the initial sale. If the product is defective due to workmanship or materials, is removed within twelve months of the initial sale and is returned to VINOTEMP, in the original shipping carton, shipping prepaid, VINOTEMP will at its option, repair or replace the product free of charge. Additionally VINOTEMP warrants all parts to be free from defects for a period of sixty months after initial sale.

This warranty constitutes the entire warranty of the VINOTEMP with respect to its products and is in lieu of all other warranties, express or implied, including any of fitness for a particular purpose. In no event shall VINOTEMP be responsible for any consequential damages what is so ever. Any modification or unauthorized repair of VINOTEMP products shall void this warranty.

Service under Warranty

This service is provided to customers within the continental UNITED STATES only. VINOTEMP cooling units are warranted to produce the stated number of BTU/H. While every effort has been made to provide accurate guidelines, VINOTEMP can not warranty its units to cool a particular enclosure.

In case of failure, VINOTEMP cooling units must be repaired by the factory or its authorized agent. Repairs or modifications made by anyone else will void the warranty.

Should a VINOTEMP cooling unit fail, contact the dealer for instructions. Do not return the unit to the factory without authorization from VINOTEMP. If the unit requires repair, re-pack it in the original shipping carton and return it to the factory, shipping prepaid. VINOTEMP will not accept COD shipments. If the unit

is determined to be faulty and is within the twelve month warranty period VINOTEMP will, at its discretion, repair or replace the unit and return it free of charge to the original retail customer. If the unit is found to be in good working order, or beyond the initial twelve month period, it will be returned freight collect.

2. Limitation of Implied Warranty

VINOTEMP'S SOLE LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO, AT OUR OPTION, REPAIRING OR REPLACING OF UNIT.

VINOTEMP SHALL NOT BE LIABLE FOR:
DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THE UNIT, DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THE UNIT, LOSS OF TIME OR COMMERCIAL LOSS, ANY OUTER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE.

THIS WARRANTY IS EXCLUSIBE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR INPLIED, INCLUDING BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

While great effort has been made to provide accurate guidelines VINOTEMP cannot warrant its units to properly cool a particular enclosure. Customers are cautioned that enclosure construction, unit location and many other factors can affect the operation and performance of the unit. There for suitability of the unit for a specific enclosure or application must be determined by the customer and cannot be warranted by VINOTEMP.

Appendix

I. Enclosure

This is only a guide and should be considered as minimum requirements.
All interior walls and floors should have a vapor barrier and a minimum of R11 insulation. All exterior walls and ceiling should have a vapor barrier and a minimum of R19 insulation. The vapor barrier should be installed on the warm side of the insulation. There should be no glass doors. All joints, door frames, electrical outlets or switches and any pipes or vents that go through the enclosure should be sealed to prevent air and moisture leakage into the room. Concrete, rock, and brick are not insulation or vapor barriers.

Doors should be of a minimum size, insulated to at least R11 and tightly sealed with high quality weather stripping. Be sure to seal the bottom of the door and fill gap between the door's frame and wall before installing the cap molding.
Lighting should be of low wattage, with a timer to insure lights are not left on when the enclosure is not occupied. Recessed lighting should not be used as it will allow outside air to enter the enclosure.

The ambient temperature surrounding the enclosure should not exceed the temperature of the cabinet by more than 25 °F. No enclosure wall should receive direct sun or strong wind. Proper sealing of the enclosure through the use of a vapor barrier and weather stripping cannot be over emphasized.

The cooling system will not be able to maintain the proper conditions if fresh moisture-laden air is constantly being introduced to the enclosure. Symptoms of this condition are; unit runs all the time with only a slight reduction in temperature and/or water overflows from the unit. One way of discovering gross air leaks is to stand inside the enclosure with the lights off, allow your eyes to adapt to the dark and look for light showing through cracks in the walls or around the door. Because of the temperature difference between the inside and outside, very small cracks can allow large amounts of outside air to enter into the enclosure. Please be aware that moisture can pass through solid concrete, paint and wood. Often a newly constructed room contains fresh wood, paint, concrete and other building materials. These materials contain large amounts of moisture. When placed into operation in this type of environment, the system will work harder to remove this extra moisture resulting in increased "run" time.
In areas where the relative humidity is very low, the desired humidity may not be achieved without adding moisture. To add moisture, use only slow, natural evaporation from a small water container using distilled water. Do not use a humidifier.